

ADDITIONAL FEES:

No additional fees are believed required; however, should it be determined that a fee is due, authorization is hereby given to charge any such fee to our Deposit Account No. 01-0268.

REMARKS

In the last Office Action, claims 1-10 were rejected under 35 U.S.C. §112, first paragraph, as lacking an enabling disclosure. The Examiner stated that the specification is enabling only for rosin as the claimed resin component, palmitic acid alkyl ester as the claimed fatty acid alkyl ester component, and the group of terpenic oil, heptane, 2-butanone and 1,4-dioxane serving as the claimed solvents, and does not provide enabling support for the broadly claimed "resin", "fatty acid alkyl ester" and "solvent". The Examiner pointed out that the invention is drawn to a coating solution having improved properties, which are believed to be influenced by the nature of the precise ingredients used in formulating the coating solution.

Claims 1-10 were further rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner pointed to various informalities in the claims. The Examiner also pointed to minor informalities in the specification.

Applicant and applicant's undersigned attorney acknowledge with appreciation the Examiner's indication that claims 1-10 contain patentable subject matter and would be deemed allowable if amended to overcome the rejections under 35 U.S.C. §112.

By the present response, the specification has been amended to correct the informalities noted by the Examiner and claims 1-4 and 6-9 have been amended to overcome the Examiner's indefiniteness rejections by replacing the phrases deemed indefinite by the Examiner with the Examiner's suggested language.

To obtain a fuller scope of coverage, new claims 11-18 have been added. Adequate support for the subject matter recited by these claims may be found in the specification as originally filed.

For the reasons discussed below, applicant respectfully submits that subject matter recited by claims 1-18 is fully enabled by the specification.

Applicant's disclosure of representative examples for the claimed solvents, clearing solution and functional agents used in the inventive coating solution is not an admission that the representative examples are critical or essential to the claimed invention. Nor does the disclosure lead the ordinarily skilled artisan to believe that the representative compounds are necessary constituent elements of

the claimed coating solution. The Examiner's conclusion that such examples are essential features of the claimed compound is contrary to fundamental tenets of the Patent Law.

The disclosure of representative examples of various solvents, clearing agents and functional agents usable in the claimed coating solution was made to support claims of varying scope, including the broad coverage of original independent claims 1 and 6 and newly added claim 12, and the more narrow coverage of original dependent claims 2-5, 7-10 and 13-18.

Applicant's disclosure is more specific, more detailed and more forthright than required by the minimal disclosure requirements of the Patent Law, which requires only a minimally enabling disclosure. The disclosure of widely known generic compounds having well-established, controllable, and expectable results is sufficient to satisfy the enablement requirements of 35 U.S.C. §112, first paragraph. The disclosure of specific amides, specific solvents, specific resins, and specific fatty acid alkyl esters was not necessary to satisfy the requirements of the Patent Law since such compounds are well-known constituents of coating solutions, as disclosed by applicant's issued U.S. Patent No. 5,721,301. See General Electric Co. v. Brenner, 159 USPQ 335, 337 (DC Cir. 1968) (specification need not disclose what is known, conventional, or that which the skilled already possess).

As pointed out by applicant in the summary of the invention at page 2 of the specification, the invention differs from the prior art primarily in the use of an amide as a clearing agent. The advantages of using an amide are discussed throughout the specification through the use of comparative examples. The use of specific solvents in those examples is not relevant to the claimed invention. Nor is the addition of a functional agent, such as a specific resin or a fatty acid alkyl ester, for achieving a desired coating feature. The ordinarily skilled chemist would clearly understand that the type of functional agent additive used in the coating solution would depend upon the desired surface feature. The examples disclosed in the specification are illustrative only.

Accordingly, the Patent Law does not require applicant to disclose examples of the known constituents of his invention -- which, here, are solvents, clearing agents and functional agents having well-known properties and uses. That various representative examples are disclosed cannot rightfully be used as a basis to compel applicant to narrow his claims to cover unnecessary details of his disclosed embodiments.

The specification clearly defines the purpose and nature of each of the ingredients of the inventive coating solution. The claimed solvents ensure that the main

ingredients (the silicone oil and the polymethacrylic acid alkyl ester) are dissolved to form uniform solutions. Many effective solvents are disclosed in applicant's issued U.S. Patent No. 5,721,301. There is no support in the Patent Law for requiring applicant to include the specific solvents used in inventive examples (b) - (d) in his broad claims. One of ordinary skill in the art would immediately recognize that many different solvents could be used for the intended purpose.

The present invention concerns the addition of an amide compound as a clearing agent to a coating solution formed of a silicon oil and a polymethacrylic acid alkyl ester in an amount effective to dissolve the silicone oil and the polymethacrylic acid alkyl ester to form a clear solution. The purpose of the clearing agent is to form a clear solution. The efficacy of applicant's invention is proven by the disclosure of comparative experimental results confirming that smaller amounts of the amides formamide, acetamide and formohydrazide result in a clear solution of the silicon oil and polymethacrylic acid alkyl ester than other additives such as methanol.

In addition, there can be no legitimate argument that "undue experimentation" is required to determine whether an amide other than those used in applicant's comparative examples would be effective in producing a clear solution.

The level of experimentation that would be required is minimal, routine, and clearly not "undue" and, as shown in the comparative examples, merely consists of adding an amide to a mixture of two solutes and observing the clarity of the resultant. The invention concerns the use of an amide as a clearing agent, and is not limited to the specific examples disclosed by applicant.

The addition of a functional agent is an optional limitation of the present invention for achieving a desired coating feature. For instance, applicant discloses the addition of a resin to achieve a glossy finish or a fatty acid alkyl ester to impart a smoothing feature. "Rosin" is merely disclosed as a "typical" example of a resin (specification, pg. 4, line 2). The addition of a finishing agent is performed to achieve a desired finish. Thus, it should be clear that the type of finishing agent additive depends upon the desired finish and that the representative examples disclosed by applicant are not critical to the claimed invention.

The admitted prior art, which is comprised of applicant's previous work as disclosed in U.S. Patent No. 5,721,301, discloses a coating solution formed of an ingredient solute comprised of silicone oil and polymethacrylic acid alkyl ester, a basic solvent selected from the group consisting of terpenic oil, heptane, n-decane,

tetrachloroethane, 2-butanone, 1,4-dioxane, ethoxyethanol and toluene, and a buffer solvent selected from the group consisting of methanol, aceticacidalkyl and tetrachloromethane. The buffer solvent is added to a mixture of the ingredient solute and the basic solvent so that both the silicone oil and the polymethacrylic acid alkyl ester can be dissolved to form a uniform solution.

The laundry list of solvents noted above is noted at page 1 of the specification. Such solvents are among the countless solvents usable in a silicon oil PMAE coating solution. Disclosure of such solvents by applicant as being within the scope of known solvents makes it clear that the claimed invention is not limited to the solvents used by applicant in the comparative or inventive examples.

The inventive coating solution comprises a first solute of a silicone oil and a second solute of a polymethacrylic acid alkyl ester, and a clearing agent comprising one or more amides added to a mixture of the first and second solutes in an amount effective to dissolve the silicone oil and the polymethacrylic acid alkyl ester to form a clear solution. As noted above, the solvents, the silicon oil, and the polymethacrylic acid alkyl esters are all well known compounds. The use of an amide as a clearing agent is not.

A functional agent is optionally added to the mixture of the first and second ingredient solutes in an amount effective to impart a desired coating feature to the clear solution. As noted above, the type of functional agent added is based on the desired coating feature. Disclosure of a resin, a rosin, and particular fatty acid alkyl esters should not be interpreted as limiting the broader aspects of the invention -- which do not require addition of a functional agent or any specific type of functional agent.

By attempting to limit the scope of applicant's invention to the specific compounds used in the inventive examples as the solvents, the clearing agent and the functional agent, the Examiner is erroneously penalizing applicant for being more specific, detailed and forthright than the law otherwise requires. It is well settled that the claims need not recite the specific details of the preferred embodiments. As pointed out by the Court in Amgen Inc. v. Chugai Pharmaceutical Co., 18 USPQ 2d 1016, 1027 (Fed. Cir.), cert. denied, 502 U.S. 856 (1991):

It is well established that a patent applicant is entitled to claim his invention generically, when he describes it sufficiently to meet the requirements of Section 112. See Utter v. Hiraga, 845 F.2d 993, 998, 6 USPQ2d 1709, 1714 (Fed. Cir. 1988) ("A specification may, within the meaning of 35 U.S.C. § 112 ¶1, contain a written description of a broadly claimed invention without describing all species that claim encompasses."); In re Robins, 429 F.2d 452, 456-57, 166 USPQ 552, 555 (C.C.P.A. 1970) ("[R]epresentative samples

are not required by the statute and are not an end in themselves.").

The present invention relates to a coating solution which may serve as a water repellant or polishing agent, and which is produced by mixing a known silicone oil solute and a known polymethacrylic acid alkyl ester solute with a clearing agent comprised of an amide. The Examiner has not demonstrated that recitation of an amide requires undue experimentation as to the types of amides usable in the claimed invention. In re Angstadt, 190 USPQ 214, 219 (CCPA 1976) ("... the PTO has the burden of giving reasons, supported by the record as a whole, why the specification is not enabling ... Showing that the disclosure entails undue experimentation is part of the PTO's initial burden"). As pointed out above, any experimentation required to determine the efficacy of a given amide would involve adding that amide to a mixture of the first and second solutes and observing the clarity of the resulting solution. Such minimal activity clearly does not rise to the level of undue experimentation.

Finally, applicant respectfully disagrees with the Examiner's contention that recitation of "terpenic oil" is indefinite. The term "terpenic oil" is well known, as will be revealed to the Examiner by a simple internet search of the term.

In view of the foregoing amendments and discussion,
the application is believed to be in allowable form.
Accordingly, favorable reconsideration and allowance of the
claims are most respectfully requested.

Respectfully submitted,

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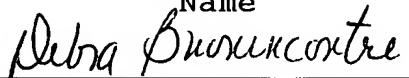
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MAILING CERTIFICATE

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: MS NON-FEE AMENDMENT, COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

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Name



Signature

August 7, 2003

Date